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10/749,003	12/30/2003	Thomas Schwalb	014951/0491	8381

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SCHULTE ROTH & ZABEL LLP  
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NEW YORK, NY 10022

EXAMINER
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SINKANTARAKORN, PAWARIS

ART UNIT	PAPER NUMBER
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2616

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07/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/749,003

Applicant(s)

SCHWALB, THOMAS

Examiner

Pao Sinkantarakorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-23, 25-29, 31-51, 53-56, and 58-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Bertacchi (US 6,625,461).

**Regarding claims 1, 8, and 15**, Bertacchi discloses a method, comprising the steps of:

receiving an originating telephone transaction message from a first network, the originating message having a first network messaging protocol and requesting subscriber information from a home registration database located on a second network, the first and second networks using disparate messaging protocols (see column 6 line

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13 – column 7 line 9 and column 10 lines 19-35, a domestic VMSC or GMSC receives an originating MSCID from a first mobile station, the domestic VMSC or GMSC then request current location information of a second mobile station from a foreign Home Location Register (HLR), wherein the domestic and foreign VMSCs or GMSCs might not recognize the received (originating or terminating) MSCIDs, which implies that the first and second mobile stations use different message protocols);

converting the first network messaging protocol of the originating message into a second network messaging protocol (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

forwarding the converted originating message to the home registration database of the second network (see column 6 lines 28-37 and column 10 lines 19-35, the domestic VMSC or GMSC contacts, via an international signaling connection, a foreign HLR; the domestic GMSC converts the originating message containing MIN to a location request message containing MSCID and sends the location request message to the foreign HLR.);

receiving a responding message from the second network, the responding message having the second network messaging protocol (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

converting the second network messaging protocol of the responding message into the first network messaging protocol (see column 6 line 60 – column 7 line 9, the

domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network; in this case, the foreign cellular network is the originating network because the originating network is foreign to the destination network); and

forwarding the converted responding message to an originator on the first network (see column 6 line 60 – column 7 line 9 and column 10 line 58 – column 11 line 12, the location response message is then sent to the domestic GMSC, the domestic GMSC then forwards a response to the first mobile station to inform the first mobile station of the completion of the connection setup);

**regarding claims 2, 9, and 16**, the step of converting the first network messaging protocol further comprises a step of deriving a destination point code in the second network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claims 3, 10, and 17**, the step of converting the second network messaging protocol further comprises a step of deriving a destination point code in the first network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claims 4, 5, 11, 12, 18, and 19**, the step of converting the first/second network messaging protocol further comprises a step of converting a format of an originator's address (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

**regarding claims 6, 7, 13, 14, 20, and 21**, the step of converting the first/second network messaging protocol further comprises a step of converting a format of a destination address ((see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received physical address into a physical address compatible with the signaling system used by the foreign cellular network).

**Regarding claims 22 and 28**, Bertacchi discloses a method, comprising the steps of:

receiving a telephone transaction initiation or response message that originated with a telephone set or node currently located in a first network, the message bearing an originator's registration number identifying the address of the initiating node in the first network, the first and second networks using disparate signaling protocols (see column 6 line 13 – column 7 line 9 and column 10 lines 19-35, a domestic VMSC or GMSC receives an originating MSCID from a first mobile station, the domestic VMSC or GMSC then request current location information of a second mobile station from a foreign Home Location Register (HLR), wherein the domestic and foreign VMSCs or GMSCs might not recognize the received (originating or terminating) MSCIDs, which implies that the first and second mobile stations use different message protocols);

querying the originator's home registration database using the network protocol of the second network to determine the registration status of the originator (see column 6 lines 28-37 and column 10 lines 19-35, the domestic VMSC or GMSC contacts, via an international signaling connection, a foreign HLR; the domestic GMSC converts the originating message containing MIN to a location request message containing MSCID

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and sends the location request message to the foreign HLR to obtain an MSCID of the second mobile station); .

forwarding registration status information to the first network in the network protocol of the first network (see column 6 line 60 – column 7 line 9 and column 10 line 58 – column 11 line 12, the location response message is then sent to the domestic GMSC, the domestic GMSC then forwards a response to the first mobile station to inform the first mobile station of the completion of the connection setup);

**regarding claims 23 and 29**, further comprising the step of converting a format of the initiation message into a format utilized by the first network (see column 6 lines 28-37 and column 10 lines 19-35);

**regarding claims 25 and 31**, further comprising the step of converting an address of the telephone set from a format utilized by the second network into a format utilized by the first network (see column 6 lines 28-37 and column 10 lines 19-35);

**regarding claims 26 and 32**, further comprising the step of generating a destination point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claim 27**, the step of generating a destination point code further comprises inserting a virtual point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC).

**Regarding claims 33 and 42**, Bertacchi discloses a method, comprising the steps of:

receiving an originating telephone transaction message from a first network, the originating message having a first network messaging protocol and having a first virtual point code as its destination point code (see column 6 line 13 – column 7 line 9 and column 10 lines 19-35, a domestic VMSC or GMSC receives an originating MSCID and physical address from a first mobile station, wherein the originating MSCID and physical address is for the domestic VMSC or GMSC to request current location information of a second mobile station in a foreign network);

converting the first network messaging protocol of the originating message into a second network messaging protocol (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

forwarding the converted originating message to a home registration database of the second network (see column 6 lines 28-37 and column 10 lines 19-35, the domestic VMSC or GMSC contacts, via an international signaling connection, a foreign HLR; the domestic GMSC converts the originating message containing MIN to a location request message containing MSCID and sends the location request message to the foreign HLR.);

receiving a responding message from the second network, the responding message having the second network messaging protocol and having a second virtual point code as its destination point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the



domestic GMSC; the domestic GMSC address corresponds to the second virtual point code);

converting the second network messaging protocol of the responding message into the first network messaging protocol (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network; in this case, the foreign cellular network is the originating network because the originating network is foreign to the destination network); and

forwarding the converted responding message to an originator on the first network (see column 6 line 60 – column 7 line 9 and column 10 line 58 – column 11 line 12, the location response message is then sent to the domestic GMSC, the domestic GMSC then forwards a response to the first mobile station to inform the first mobile station of the completion of the connection setup);

**regarding claims 34 and 43**, the step of forwarding the converted originating message to the home registration database further comprises a step of replacing the first virtual point code with a destination code identifying a node on the second network (see column 6 line 60 – column 7 line 9);

**regarding claims 35 and 44**, the step of forwarding the converted responding message to the originator further comprises a step of replacing the second virtual point code with a destination code identifying a node on the first network (see column 6 line 60 – column 7 line 9);

**regarding claims 36 and 45**, the step of converting the first network messaging protocol further comprises a step of deriving a destination point code in the second network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claims 37 and 46**, the step of converting the second network messaging protocol further comprises a step of deriving a destination point code in the first network (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claims 38, 39, 47, and 48**, the step of converting the first/second network messaging protocol further comprises a step of converting a format of an originator's address (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

**regarding claims 40, 41, 49, and 50**, the step of converting the first network messaging protocol further comprises a step of converting a format of a destination address (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received physical address into a physical address compatible with the signaling system used by the foreign cellular network).

**Regarding claims 51 and 56**, Bertacchi discloses a method, comprising the steps of:

receiving a first telephonic transaction message from a destination on a first network, the first telephone transaction message having a first network messaging

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protocol and being directed to a destination on a second network, the first and second networks using disparate messaging protocols (see column 6 line 13 – column 7 line 9 and column 10 lines 19-35, a domestic VMSC or GMSC receives an originating MSCID and physical address from a first mobile station, wherein the originating MSCID and physical address is for the domestic VMSC or GMSC to request current location information of a second mobile station in a foreign network, and the domestic and foreign VMSCs or GMSCs might not recognize the received (originating or terminating) MSCIDs, which implies that the first and second mobile stations use different message protocols);

converting the first network messaging protocol of the first telephone transaction message into a second network messaging protocol (see column 6 line 60 – column 7 line 9, the domestic VMSC or GMSC translates the received MSCID into a MSCID compatible with the signaling system used by the foreign cellular network);

forwarding the converted first telephone transaction message to the second network (see column 6 lines 28-37 and column 10 lines 19-35, the domestic VMSC or GMSC contacts, via an international signaling connection, a foreign HLR; the domestic GMSC converts the originating message containing MIN to a location request message containing MSCID and sends the location request message to the foreign HLR);

wherein said step of converting the first network messaging protocol comprises a one-step table-driven conversion (see column 6 line 60 – column 7 line 9 and column 8 lines 55-60, the domestic VMSC or GMSC translates the received MSCID or physical address into a physical address compatible with the signaling system used by the

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foreign cellular network; the conversion can be accomplished using a table that contains a list of MSCIDs or other physical location information and a corresponding physical address for the VMSC that is compatible with the signaling system used by the foreign cellular network)

**regarding claims 53 and 58**, further comprising the step of converting an address of said destination on said second network from a format utilized by said first network into a format utilized by said second network (see column 6 lines 28-37 and column 10 lines 19-35);

**regarding claims 54 and 59**, further comprising a step of generating a destination point code (see column 10 line 58 – column 11 line 6, the foreign HLR sends a location response message containing MSCID of the VMSC to the domestic GMSC);

**regarding claims 55 and 60**, the step of generating the destination point code further comprises inserting a virtual point code (see column 10 line 58 – column 11 line 6);

**regarding claim 61**, further comprising a means for implementing origin-based routing (see column 10 line 58 – column 11 line 6);

**regarding claim 62**, further comprising an odd/even indicator (see column 10 line 58 – column 11 line 6, TLDN).

### ***Claim Rejections - 35 USC § 103***

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24, 30, 52, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertacchi in view of Joensuu (US 5,867,788).

**Regarding claims 24, 30, 52, and 57**, Bertacchi discloses all the subject matter of the claimed invention except the method/apparatus, wherein the step of converting the format of the message is performed by matching values of the format of the message with values of the format utilized by the first/second network.

However, the invention of Joensuu from the same or similar fields of endeavor discloses the step of converting the format of the message is performed by detecting the translation type included in the message, wherein the translation type indicates that the routing should be performed using a specific protocol (see column 6 lines 62-67).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method/apparatus, wherein the step of converting the format of the message is performed by matching values of the format of the message with values of the format utilized by the first/second network as taught by Joensuu into the method and system for providing compatibility between networks of Bertacchi.

The motivation for implementing a method/apparatus, wherein the step of converting the format of the message is performed by matching values of the format of the message with values of the format utilized by the first/second network is that it increases the efficiency of the method/apparatus.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gentry (US 6,453,162) and Widergen et al. (US 5,890,064) are cited to show systems/methods/ considered pertinent to the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-

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270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS



RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER